

1.Security Classification of this page: OPEN

2.Type of Document

Project Document

3. Report No : Date : 5. Security Classification/
PD SE 8917 : Sep,89. : Restricted
: :
: :

6. Title/Sub-title Moment stability Derivatives of N A G
Missile Configuration at Low Speed using
Semi-free Dynamic Flying

7. Author(s) S.Balakrishna, T.Niranjana and S.R.Rajan

8. Division/Section SED :9. Project No.SE - 0 -144

10. Type of report/ : 11. Pages 12 : 12. Approved by/
Period covered : tables : No.of copies
: Figures 17 : 20
P.D.

13.a) Sponsoring Agency(s) : 13.b) Participating Agency(s)
DRDL : SED , NAL

14. Keywords Dynamic Flying, Stability Derivatives

15. Abstract: Dynamic flying of scaled model exploits the advantages of flight test methodology and wind tunnel flexibility to generate stability derivative data in evaluated using dynamic flying A 1: 1.45 scaled model is flown in a low speed tunnel and its pitching response to servoed tail drive doublet is analysed using Maximum Likelihood Estimation method. The results indicate a low angle of attack static instability for the tested configuration.

NATIONAL AERONAUTICAL LABORATORY
BANGALORE, INDIA